Listing and Amendments to the Claims

This listing of claims replaces all prior versions and listing of claims in this application.

1. (Currently Amended) A switched mode power supply comprising

a transformer having a primary winding and at least one secondary winding,

a first rectifier means coupled to said secondary winding for providing a rectified voltage,

a switching transistor arranged in series with said primary winding, and

a control circuit with a driver stage coupled to a control input of the switching transistor for controlling an output voltage, the control circuit comprising an oscillator with a terminal, to which a first capacitor is coupled and the control circuit providing a reference voltage for charging said capacitor for determining the oscillation frequency of said oscillator for a start-up phase,

a start-up circuit coupled to a second capacitor for providing an operating voltage for the control circuit,

a third rectifier means coupled between said first rectifier means and the second capacitor for charging the second capacitor during operation of the switched mode power supply,

wherein said terminal is further coupled via a resistor to said rectified voltage at a node between said first rectifier means and third rectifier means, for providing an additional charge current for said capacitor for increasing the oscillation frequency of the oscillator during operation, with regard to the start-up phase.

2. (Cancelled).

3. (Previously Presented) The switched mode power supply as claimed in claim 1, wherein said terminal is connected via a low-pass filter to said first rectifier means.

4 (Previously Presented) The switched mode power supply as claimed in claim 3, wherein the low-pass filter has a time constant which is smaller than the period of the switching frequency of the switching transistor.

5. (Previously Presented) The switched mode power supply as claimed in claim 1, wherein the control circuit is arranged in an integrated circuit.

6. (Cancelled).

7. (Currently Amended) The switched mode power supply as claimed in claim 1, wherein ~~the~~ said secondary winding is connected via the first rectifier means to a low-pass filter for the purpose of generating a rectified pulsed voltage during the normal mode of operation, and in that the rectified pulsed voltage is connected via ~~the~~ a second rectifier means and the resistor to ~~the~~ said terminal of the control circuit.

8. (Cancelled)

9. (Previously Presented) The switched mode power supply as claimed in claim 1, wherein the control circuit is integrated in an integrated circuit, which acts as a current mode controller and is coupled to a measurement resistor connected in series with the switching transistor.